



J Wolf del et lith

PROSIMIA XANTHOMYSTAX.



Wolf del. et lith

M & N Hand

PROSIMIA MELANOCEPHALA.



Wolf del et lith

M & N Harb

OTOGALE PALLIDA

it would more and more interfere with the bearer's means of obtaining a livelihood; and hence, weakened by starvation, the bird was finally unable to rise, and met its death in the manner stated.

If, as I believe, the clay accumulated by degrees, it is obvious that there was once a time when the incipient mass was no heavier a burthen than the bird was able to bear in flight. What the actual limit was, is a question we have no means of determining; at least I am not aware of any experiments having been made tending to show what weight a Partridge is capable of supporting on the wing. But I trust I have said enough to justify me in bringing this before the Society as a singular illustration of the manner in which birds may occasionally aid in the dispersion of seeds.

6. REVISION OF THE SPECIES OF LEMUROID ANIMALS, WITH THE DESCRIPTION OF SOME NEW SPECIES. BY DR. J. E. GRAY, F.R.S., ETC.

(Plates XVII., XVIII., XIX.)

Having to examine some recently acquired specimens of Lemuroid animals from Western Africa, I was induced to re-examine the series of specimens of the family in the British Museum, and determine the different specimens of the genus which had been received within the last few years, and only named as they were entered in the list of accessions.

There has been published lately two monographs of the family, derived from the same collection, that in the Jardin des Plantes at Paris—the one by Isidore Geoffroy St. Hilaire and MM. Florent Prevost and Pucheran ('Catalogue Méthodique des Mammifères,' Paris, 1851), the other by a young Swedish naturalist, viz. A. G. Dahlbom ('Studia Zoologica,' Lund, 1856). And Dr. Peters, in his work on the 'Zoology of Mozambique,' has examined and described some specimens in the Berlin Museum. So that we may consider that the specimens in the best Continental museums have been carefully examined.

Every one must be struck with the number of genera into which the smaller species of the family are divided; while the larger species are all included in a single genus, divided into sections, which are more decided and more neatly characterized than several of the genera above referred to. This must be sufficiently evident when we find that the most striking and important—indeed I may say the only characters that M. Isidore Geoffroy can find to distinguish allied genera are as follows:—Hind legs, ears, and eyes very developed, *Microcebus*; hind legs, ears, and eyes extremely developed, *Galago*: to which, to be sure, he adds, the first is from Madagascar, and the second from continental Africa and the small islands adjacent to that continent.

In my outline of an attempt at the disposition of Mammalia into tribes and families, in the 'Annals of Philosophy' for 1825 (vol. x. p. 337), I divided the family *Lemuridæ* as under—

† Head long, grinders blunt. 1. *Lemurina*: Lemur, Lin. 2. *Lichanotina*: Indris, Lacép; Lichanotus, Illiger.

†† Head round. 3. *Loridina*: Loris, Geoff.; Nycticebus, Geoff. 4. *Galagonina*: Otolicnus, Illiger; Galago, Adanson; Cheirogaleus, Geoff. 5. *Tarsina*: Tarsius. 6. *Cheiromyina*: Cheiromys, Cuvier,—

considering *Galeopithecidæ* as a separate family.

M. Isidore Geoffroy, in the 'Catalogue of the Mammalia in the Paris Museum,' 1851, divides the Lemuroid animals into three families, viz. *Lemuridæ*, *Tarsidæ*, and *Cheiromyidæ*; and he divides the *Lemuridæ* into three subfamilies, according to the number of the teeth, thus—

I. *Indrisina*.—Grinders $\frac{5-5}{5-5}$; lower cutting teeth 2; in all 30. Genera *Indris*, *Propithecus*, and *Avahis*.

II. *Lemurina*.—Grinders $\frac{6-6}{6-6}$; lower cutting teeth 4; in all 36. Tarsus moderate, or of the usual length. Genera *Lemur*, *Hapalemur*, *Lepilemur*, *Cheirogaleus*, *Perodicticus*, *Nycticebus*, and *Loris*.

III. *Galagina*.—Grinders $\frac{6-6}{6-6}$; lower cutting teeth 4; in all 36. Tarsus elongate. Genera *Microcebus* and *Galago*.

The genus *Galeopithecus* is not included in the part of the work that has as yet appeared.

Mr. A. G. Dahlbom, in his 'Studies on the Primates in the Paris and other Museums,' proposes to divide the Lemurine Primates, or *Prosimiæ*, into three groups, according to the length and breadth of the feet, as defined by the comparative length of the tarsus and metatarsus, thus—

I. The *Prosimiæ brachytarsæ*, with tarsi shorter than the metatarsi. Genera *Indris*, *Avahis*, and *Propithecus*.

II. The *Prosimiæ isotarsæ*, with the tarsi and metatarsi equal in length. Genera *Perodicticus*, *Nycticebus*, *Loris*, *Lemur*, *Lepilemur*, *Cheirogaleus*.

III. The *Prosimiæ macrotarsæ*, with the tarsi much longer than the metatarsus. Genera *Galago*, *Hemigalago*, *Microcebus*, and *Tarsius*.

He regards the *Prosimiæ brachy-* and *iso-tarsæ* as forming the tenth family, *Lemuridæ*; the *Prosimiæ macrotarsæ* as a distinct or eleventh family; and forms the genus *Daubentonia*, Geoffroy (or *Cheiromys* of Cuvier), into a twelfth family, which he calls *Glirisimiæ*.

It will be seen by the foregoing observations that M. Isidore Geoffroy divides the group of Lemuroid animals into three families, according to the form and number of the cutting teeth—thus, *Lemuridæ*, *Tarsidæ*, and *Cheiromyidæ*. I think that such a division is both natural and convenient; and at the same time every one who well examines the osteological characters and the general habit, as well as the external appearance, of the two genera *Tarsius* and

Daubentonia, will come to the conclusion that in the zoological series the Aye-Aye (*Daubentonia*) is properly placed with the Lemuroid Mammalia, and that the genus *Tarsius*, by the disposition and the form of the teeth and by the length of the fingers, forms the link which explains the peculiarities of this otherwise apparently anomalous animal.

Fam. I. LEMURIDÆ.

Cutting teeth $\frac{2-2}{6}$ or $\frac{1-1}{4}$; the upper far apart; the lower compressed, shelving forward, the two outer larger, opposed to the space between the upper cutting teeth. The fingers and toes free, well developed; the first hind toe shorter, with an elongate curved claw.

Believing that the form of the head and size of the eyes, which indicate the extent of the nocturnal habits of the animal, are of more importance than the mere length and slenderness of the foot, I have proposed the following arrangement of the genera.

I observe that the length of the ears varies considerably in what are in other respects very nearly allied species, and that the ears are very often distorted in the stuffed specimens—so much so that a species may sometimes be said to have a long ear, while if observed alive it would be regarded as only having a moderately developed one; for the ears are often unduly stretched by the stuffer, and the form entirely destroyed; and in some cases they are as much shrunk by not being attended to when the skin is dried. This is important, as sometimes the species, or even a genus, has been described from a living specimen or from an animal preserved in spirits, and at others from a more or less well preserved or stuffed skin; and it is this difference of state that renders the recognition of the animal so difficult, and has caused so many synonyma. For these reasons I have united together into one group some of the genera of the smaller species which have been separated on slight differences in the apparent development and size of the ears.

I propose to arrange the genera as follows:—

I. *The head elongate; face developed; eyes moderate; hind legs elongate; fingers well developed, normal.*

* *Teeth 30; hind foot very short; great toe long.* Indrinina.

1. INDRIS. Tail none.

2. PROPITHECUS. Tail elongate.

** *Teeth 36; tail elongate; great toe broad.* Lemurina.

a. *Feet short; ears moderate.*

3. VARECIA. The head surrounded by a ruff; ears tufted.

4. LEMUR. Head without any ruff; wrist with a narrow bald line and pad above.

5. PROSIMIA. Head without any ruff; ears externally hairy; wrist hairy.

b. *Feet elongate ; ears large.*

6. OTOGALE.

II. *Head short ; face short, tapering ; eyes (and orbits) very large.*

* *Hind legs elongate ; tail elongate.*

† *Teeth 30 ; feet short, broad.* Microrhynchina.

7. MICRORHYNCHUS.

†† *Teeth 36 ; feet short, broad.* Galagonina.

8. HAPALEMUR. Ears moderate ; upper cutting teeth on the inside of canine.

9. CHEIROGALEUS. Ears moderate ; upper cutting teeth in an arched series.

10. LEPILEMUR. Ears large, elongate ; upper cutting teeth in an arched series. Tail with close-set short hair.

11. CALLOTUS. Ears very large, contractile. Tail with bushy hairs.

††† *Teeth 36 ; feet elongate, slender.*

12. GALAGO.

** *Fore and hind feet equal ; tail none ; feet short.*

† *The hands normal ; fingers free, index clawed.* Lorisina.

13. NYCTICEBUS. Limbs short.

14. LORIS. Limbs elongate, slender.

†† *Hands broad, short ; index finger abortive, clawless.*
Perodicticina.

15. PERODICTICUS.

I. *The head elongate ; face well developed ; the eyes moderate ; the hind legs much longer than the arms ; the fingers well developed, free, elongate, normal.*

The form of the head is best seen in the skull, which in this section is elongate ; the face is well developed, rather compressed ; and the orbits, though large, are much smaller than in the succeeding sections. The length of the head and the size of the orbits vary in the different species, and the division between this and the following tribe is not very strongly marked.

* *Grinders $\frac{5-5}{5-5}$; cutting teeth $\frac{2}{4}$; in all 30. The hind foot short, broad ; great toe very long, slender.* Indrinina.

1. INDRIS, Geoff. 1796.

Lichanotus, Illig. 1811.

Pithelemur, Lesson, 1840.

Upper cutting teeth large, strong, compressed, one before the other in an arched line. Ears exerted, hairy. Nostril separated by a very narrow septum. Body thick. Feet short; tarsus shorter than the metatarsus. Tail rudimentary, very short. The great toe very long, slender, and covered with hair.

INDRIS BREVICAUDATUS, Geoff.

Lemur indri, Gmelin.

Indris niger, Vinson.

Var. white, called *Simpoune*.

Indris albus, Vinson, Compt. Rend. lv. 829.

Hab. Madagascar (*Brit. Mus.*).

The claws, like most of the *Lemuridæ*, when perfect are keeled and end in an acute tip.

Skull: length 3" 10"', breadth 2" 3"',—that is to say, measured in inches and twelfths of an inch or lines.

The four lower cutting teeth of the *Indris* occupy about the same space as the six in the other genera, the central ones being broader, while in the other genera the two central pair are very much compressed and slender; and the upper cutting teeth are stronger and broader; indeed the general character of the skull is to be stronger, though the teeth are fewer. In other respects there is very little difference in the dentition.

2. PROPITHECUS, Bennett.

Macromerus, A. Smith, 1834.

Habrocebus, Wagner, 1840.

Ears short, smooth inside, and visible in the fur. Nostrils separated by a moderate septum. Tail elongate. The two middle upper cutting teeth very large, oblique, sharp-edged. Great toe long, hairy.

PROPITHECUS DIADEMA, Bennett, P. Z. S. 1832, p. 20.

Hab. Madagascar (*Brit. Mus.*).

** Grinders $\frac{6-6}{6-6}$; cutting teeth $\frac{2-2}{6}$; the tail elongate, hairy; the great toe short, broad. Lemurina.

a. The feet short; ears hairy externally, moderate or hidden; the upper cutting teeth subequal, on the side of the more or less prominent intermaxillary bone.

The length of the feet are shown in the skeleton by the tarsal bones being shorter, or not longer, than the metatarsal ones; they are shorter than the shank or tibia, being generally about two-thirds the length of that part of the leg.

M. Isidore Geoffroy observes, the species of Lemurs "are numerous; many are very difficult to distinguish, or even doubtful."

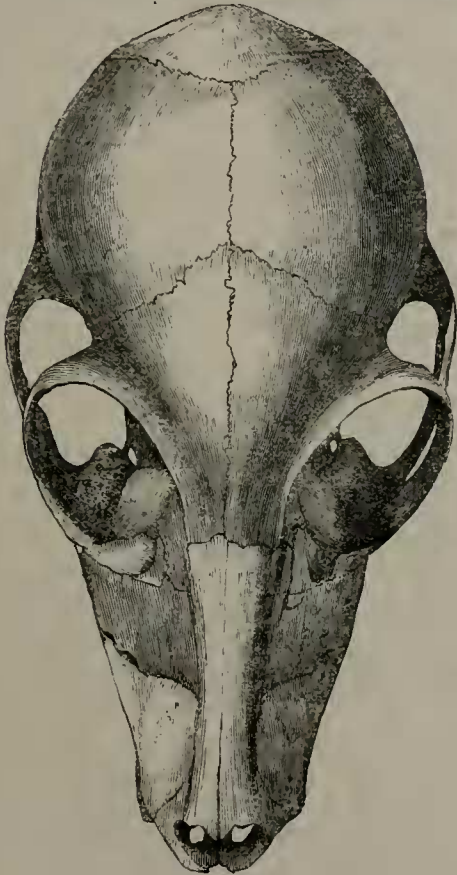
It is to be observed that I have never seen the skin of a specimen that was caught wild in its natural habitat. All the specimens that have come under my observation have been living in menageries; and all the skins in the Museum are obtained from specimens which have

been so confined; and some of them have been even born in confinement, and are probably the hybrid offspring of two species, arising from the intermixture of different kinds in the same cages. Under such circumstances, it is very natural that there should be difficulties in separating them, and that there may be intermediate forms. Yet I may state that, when the specimens which have come under my examination have been carefully compared, I have had no difficulty in distinguishing them, and I have not found a single specimen which I have had the slightest reason to believe is a passage from one species to the other. And this is extraordinary when we consider the very imperfect material that is at our command for the determination of the species of this natural genus. In fact it appears to me, after my long experience, that whenever there is any doubt about the distinction of species, it always arises rather from the imperfection of the material at our command, and the consequent imperfection of our knowledge, than from any want of permanence in the species themselves. It is this that makes me doubt the wisdom of the theorists who would explain the order of the creation by the mutability of species, and take advantage of the imperfection of our knowledge as the basis of their theory, instead of placing their faith in practical naturalists, who have studied species in detail for years, and who are all, as far as I know, ready to declare that species (the history and detail of which are well known) are the most certain and best defined groups in nature, and are distinctly circumscribed, while genera, tribes, families, orders, and even classes are constantly gradually passing into each other, or contain species, or groups of species, of which it is difficult to say to which group they should be assigned. But, unfortunately all their works have too much of the spirit of an advocate, and sometimes there is evidence of special pleading, which is misplaced in a scientific essay.

My firm opinion, founded on forty years' experience, and after having had through my hands perhaps more specimens of animals of different classes than most living zoologists, if not more than any other, is that species are permanent; indeed they appear to me to be the only groups of individuals that seem to be well defined and separated from other groups by a distinct and unvarying character. I fully agree with the observations of Messrs. Bentham and Hooker, the authors of the 'Genera Plantarum,' now being published, "that on the whole the natural grouping of individuals into species, and their limitation as such, is far more easy and satisfactory than of genera and of all the other superior groups."

It is no doubt true, as Mr. Darwin observed in his letter on Heterogenesis to the editor of the 'Athenæum' for the 25th of April 1863, that the "origin or derivation of species from gradual change, however produced, does appear to connect large classes of facts"—that is to say, if such a derivation could be proved; but, unfortunately, during all my experience, and after most careful search (for the origin of species has always been a most interesting subject of my contemplation), I have never found the slightest evidence for the support of such a theory, or the least modification of any species

leading to such an opinion. We have, on the contrary, seen that even when any hybrid specimen has been artificially produced, there is always a strong inclination for the race so produced to return to the original form. And I must consider, as the authors above quoted have stated, that "the fact that species do in botany (and, I may add, zoology) stand out as the most prominent term in the series between individual and class is perhaps the most salient obstacle to the reception of the doctrine of the origin of these through variation by natural selection," or, I would add, any other theory that has been suggested; indeed it appears to be an insurmountable difficulty to the reception of the theory of the gradual modification of species altogether, however much such a theory might, if it were true, explain some of our difficulties*.



Varecia varia.

3. VARECIA.

The cheek and chin surrounded by a fringe of long hair. The

* I would refer to Professor Haughton's paper on the 'Origin of Species,' read before the Natural History Society of Dublin, on the 21st November, 1862, as a most excellent corrective of such fallacious theories.

ears pencilled at the end. The wrist hairy. The skull elongate. Face tapering, broad behind and shelving on the sides of the nose; superciliary ridges prominent, much higher than the forehead.

1. VARECIA VARIA.

B.M.

Lemur macaco, Gmelin.

Lemur varius, Geoff.

Maki vari, Buffon, H. N. xiii. 178, t. 27.

Prosimia macaco, Gray.

Fur black and white-varied.

Hab. Madagascar (*Brit. Mus.*).

Skull, with the face much lengthened, tapering. The nose high, shelving on the side to the central ridges. The grinders large; the upper cutting teeth one before the other, on the side of the projecting intermaxillaries. The interorbital space very narrow and depressed.

Length of skull 3" 9"', breadth at zygomatic arch 2".

2. VARECIA NIGRA.

B.M.

Lemur macaco, Linn.

Lemur niger, Geoff. 1812; Schreb. Säugeth. t. 40 a; Peters, Mosamb. 21.

Fur uniform black.

Hab. Madagascar (*Brit. Mus.*).

3. VARECIA RUBRA.

B.M.

Lemur ruber, Geoff. 1812.

Fur red; wrist or ankles more or less white.

Hab. Madagascar (*Brit. Mus.*).

Skull wider, orbit more diverging, and the side of the nose higher and flatter, than in *V. varia*.

4. VARECIA LEUCOMYSTAX.

Lemur leucomystax, Bartlett, P. Z. S. 1862, p. 347, pl. xli.

Grey; patch on lower part of back and fringe round the face white.

Hab. Madagascar; living in the Zoological Gardens.

4. LEMUR.

Face without any ruff. Ears hairy externally. The hand with a bald line up the inside of the wrist, ending in a bald spot above. The tail ringed. Upper cutting teeth subequal, rather shelving. Skull with the forehead convex; face rather compressed, round above.

LEMUR CATTÀ, Linn.

B.M.

Macaco, Buffon, xiii. t. 22.

Prosimia catta, Lesson.

Hab. Madagascar.

Skull quite adult, length 3" 2"', breadth 1" 10"'; the interorbital space flattened, narrow; forehead convex.

5. PROSIMIA.

The head without any ruff or fringe. The ears hairy externally, naked at the tip, more or less exposed. The wrist hairy. The skull elongate; the face produced, rather compressed on the sides, rounded above; forehead flat.

* *Temple, cheek, forehead, and crown white.*

1. PROSIMIA ALBIFRONS.

B.M.

Lemur albifrons, Geoff.; Audeb. Makis, t. 3; Bennett, Zool. Gardens, i. 299, fig.

Grey-brown, hairs minutely punctulated; face and end of the tail black; hinder part of the head, including the forehead, cheek, temple, and base of ears, pure white; chest, belly, and inside of the limbs whitish grey.

Hab. Madagascar (*Brit. Mus.*). Living in the Zoological Gardens.

** *Temple, under the ears, and throat white.*

2. PROSIMIA NIGRIFRONS.

B.M.

Lemur nigrifrons, Geoff.; Bennett, Zool. Gard. i. 301, fig.

Blackish or grey, greyer on the sides beneath; base of the ears reddish white; cheek, throat, and chest white; nose grey; orbits, forehead, cheeks, and end of the tail black or blackish.

Hab. Madagascar (*Brit. Mus.*).

*** *Temples coloured like the back.*

3. PROSIMIA MELANOCEPHALA. (Pl. XVIII.)

B.M.

Fur yellowish brown, washed with black; chin and beneath pale rufous; head black above; cheeks, under the ears, with a convex puff of hair of the same colour as the back; tail brown, blacker at the end; hands and feet dark reddish brown.

Young of same specimen (perhaps a hybrid with some other yellow-puffed species): head rather paler; spot on side of the neck rather yellower and more silky and puff-like.

Hab. Madagascar (*Brit. Mus.*).

4. PROSIMIA MONGOZ.

B.M.

Lemur mongoz, Linn.

Mongous, Buffon, H. N. xiii. 298, t. 26.

L. albifrons of Menageries.

Fur reddish grey; throat, chest, and beneath reddish grey; the crown of the head black; face, chin, streak up the forehead and across the crown of the head black; cheeks and side of the forehead iron-grey.

Madagascar.

The specimens of this species vary in the breadth of the band or streak on the head, but it is also known by the black nose and the

iron-grey spot on each side of the forehead. Skull elongate, length 3·6, breadth 2·0; canines very large; interorbital space broad, convex; forehead flat; orbits produced on the sides.

**** *Temples rufous; the hairs elongated (forming a kind of whisker) beneath.*

5. PROSIMIA RUFIFRONS.

B.M.

Lemur mongoz, Schreb. Säugeth. i. t. 39 a (moderate).

Lemur rufifrons, Bennett, P. Z. S. 1833, p. 106; Fraser, P. Z. S. 1845; Zool. Typica, t. (bad).

Fur grey, with two small white cross streaks on each side of the rump; throat and beneath rufous; nose and line up the middle of the forehead black; sides of nose, cheeks, and large spot on each side of the forehead white; tail blackish, rather rufous at the base.

Hab. Madagascar (*Brit. Mus.*).

Both Schreber's and Fraser's figures leave out the peculiar stripes on the side of the rump.

Lemur rufus (Geoff.), *Maki roux* (Audeb. Makis, t. 2), seems to resemble this species, but we have it not; it may be only a variety.

Lemur rufiventer (I. Geoff. Cat. Mamm. 71) and *Lemur flaviventer* (I. Geoff. Cat. Mamm. 72) are probably allied species.

6. PROSIMIA XANTHOMYSTAX. (Pl. XVII.)

B.M.

Lemur xanthomystax, Gray, B.M.

Fur grey-brown, with a broad, black, indistinct dorsal streak; chin, chest, and beneath pale rufous; head and back of neck black; a large puffy spot on each side of the throat under the ear bright rufous; a large spot on each side of the forehead over the eyes grey; tail brown, blackish-washed.

Hab. Madagascar (*Brit. Mus.*).

This may be easily known from *P. mongoz* (with which it agrees by having the grey spot on the forehead) by the dorsal streak, and the red puff on the temples.

***** *Temples and cheeks and sometimes the side of the neck rufous.*

7. PROSIMIA CORONATA.

B.M.

Lemur coronatus, Gray, Ann. and Mag. N. H. 1842, x. 257; Voy. Sulphur, t. 4.

Fur pale grey; beneath reddish white; face white; temple, cheeks, and forehead rufous; spot on the crown of the head black; tail blackish, rufous at the base.

Var. white, *Maki albine*, Chenu, Ency. N. H. Quadr. 263, fig.

Hab. Madagascar (*Brit. Mus.*).

Lemur chrysampyx (Scheurmann, Acad. Brux. xxii., 1848), according to M. I. Geoffroy, differs from the foregoing species in the absence of the black spot on the crown, and the white colour of the lower and outer parts.

8. PROSIMIA ALBIMANA.

B.M.

Lemur mongoz, Audeb. Makis, t. 1.*Lemur albirana*, Geoff.

Fur dark iron-grey, with a black streak on the hinder part of the back, and a black broad crescent at the base of the tail; nose, outer base of the ears, hands, chin, chest, and beneath white; temples and sides of the throat rufous; spot on forehead and underpart of orbit blackish.

Hab. Madagascar (*Brit. Mus.*).

9. PROSIMIA ANJUANENSIS.

B.M.

Lemur anjuanensis, Geoff.

Fur reddish iron-grey; chin and beneath paler; nose, head, nape, front of the body, and shoulders blackish grey; temples and outer base of the ears black; a large roundish spot on the side of the neck, under the ears, rufous; tail blackish-washed.

Hab. Madagascar (*Brit. Mus.*).

Easily known from *P. collaris* by the small size of the rufous spot on the side of the neck, and the black nose and head.

10. PROSIMIA COLLARIS.

B.M.

Lemur collaris, Geoff.

Fur dark or pale iron-grey; nose, outer base of the ears, chin, throat, and beneath white; orbits, temples, side of the face, chin, and sides of the throat rufous; tail iron-grey, rufous at the base.

Hab. Madagascar (*Brit. Mus.*).

This species differs from *P. albirana* in the rufous spot on the side of the face being more extended, and the hands and feet are dark iron-grey. There is no dorsal stripe nor crescent at the base of the tail.

Prosimia ruffrons is easily known by the two small white stripes across each side of the rump.

P. albifrons by the white back of the head.*P. melanocephala* by the black head and yellowish fur.*P. xanthomystax* by the indistinct broad black stripe down the back.*P. albirana* by the black dorsal streak and crescent at the base of the tail, and white feet.*P. coronata* and *P. collaris* by the rufous band across the forehead.

b. *Feet elongate; tarsus longer than the metacarpus; ears exposed, nakedish.*

6. OTOGALE.

Ears large, membranaceous, contractile backwards. Cutting teeth $\frac{2-2}{6}$; upper slender, equal, nearly in the same line; lower close together, and projecting horizontally forwards. Skull rather elongate, broad. Anterior false grinder elongate, erect, conical, compressed,

with a slight notch at each side near its base; the lower canine large, conical, bent up; grinders large, broad.

* *Skull and face elongate.* Otogale.

1. OTOGALE GARNETTII.

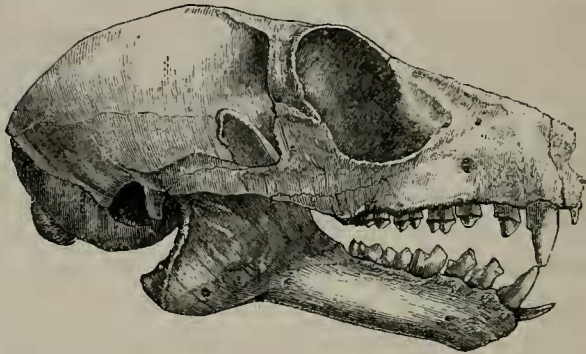
B.M.

Otolicnus garnettii, Ogilby, P. Z. S. 1838, p. 6.

Pale brown, yellowish beneath, with a white narrow band on each side of the loins. Tail half the length of the body; perhaps injured.

Hab. Port Natal.

Skull, length 2" 11^{'''}, breadth 1" 10^½^{'''}.



Otogale garnettii.

2. OTOGALE CRASSICAUDATA.

B.M.

Otolicnus crassicaudatus, Peters, Mossamb. t. 2. t. 4. f. 1-5; Schrank. Cat. Bones B. M.

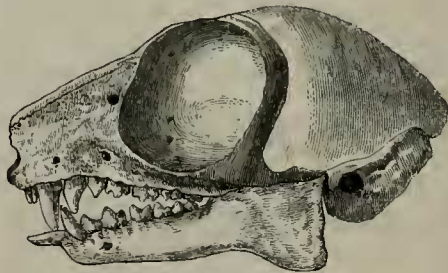
Galago crassicaudatus, Geoff. 1812.

Lemur crassicaudatus, Blainv.

Tail very long and thick.

Hab. Port Natal; East and West Africa; Mozambique (*Sunderall*).

Skull, length 2" 7^{'''}, breadth 1" 8^{'''}.



Otogale pallida.

** *Head short, broad; face short, conical; eyes large.* Enoticus.

OTOGALE PALLIDA, n. sp. (Pl. XIX.)

B.M.

Fur pale grey, whitish beneath, with a roundish white spot on the

side over the axilla and the groin; tail very long, cylindrical, nearly half as long again as the body and head.

Hab. Fernando Po (*Capt. Burton*, H. M. Consul).

Hind feet 2" 6''' . Skull, length 2" , breadth 1" 4''' .

Skull: orbits prominent and produced on the sides, wider than the zygomatic arch.

This species, which has the teeth exactly like the other Otogales, by the shortness of its head and the large size of the eyes and orbit of the skull forms a passage to the Galagoids*.

II. *The head short, subglobose; face short, tapering; eyes very large.*

The skull is short, broad, depressed. The face very short, conical, tapering. Orbits very large, the zygomatic arches slender.

* *The hind legs much longer than the fore; fingers free, well developed; tail elongate, hairy.*

† *Feet short, broad; ears small, hairy, hidden; teeth 30, viz. grinders $\frac{5-5}{5-5}$, cutting teeth $\frac{2}{4}$.* Microrhynchina.

7. MICRORHYNCHUS, Jourdan, 1834.

Avahis, I. Geoff. 1835.

Indris, A. Smith, 1834.

Semnocebus, Lesson, 1840.

Tail elongate, cylindrical, hairy. Ears hidden under the fur. Nostrils separated by a narrow septum. Hind foot short and broad. Claws elongate, convex, acute; claw of front toe elongate, cylindrical.

MICRORHYNCHUS LANIGER.

B.M.

Lemur laniger, Gmelin.

L. lanatus, Schreb.

Avahis laniger, I. Geoff.

Brown, varied; rump, spot over groin, and beneath whitish, with a narrow white lunate band on the forehead.

Hab. Madagascar.

Length of foot about $2\frac{1}{2}$ inches.

†† *Feet short and broad, about two-thirds the length of the shank or shin; teeth 36, grinders $\frac{6-6}{6-6}$, cutting teeth $\frac{2-2}{6}$, the upper ones placed one before the other.* Galagonina.

8. HAPALEMUR, I. Geoff.

Hapalolemur, Giebel, 1859.

* Since this paper has been in print, I have procured from among some fragments of skins belonging to M. Du Chaillu a very imperfect skin, in a bad state, of a Lemur which appears to belong to this species; but it has a small white tip to the tail (probably accidental). It is marked "*Otolicus apicalis*," so that this white-tipped variety is probably the animal noticed under that name in the Appendix to M. Du Chaillu's 'Travels,' p. 471.

Cutting teeth $\frac{2-2}{6}$, the upper ones behind the other on each side, crowded on the inside of the canine. Ears short and hairy. Tail elongate, hairy. Hinder limbs much longer than the front ones.

1. HAPALEMUR GRISEUS, I. Geoff. Cat. Méth. 75. B.M.

Lemur griseus, Geoff. 1796.

Maki gris, Buffon, Supp. vii. t. 24.

Cheirogaleus griseus, Van der Hoeven, Tijdsch. 1844, xi. t. 1. f. 1 (skull).

Dark iron-grey, with a yellowish tinge; hairs black, with a sub-apical reddish band; underside rather paler.

Hab. Madagascar. Shot in the woods.

The upper cutting teeth are placed one before the other, and crowded back so as to be on the inner side of the canine.

2. HAPALEMUR OLIVACEUS, I. Geoff. 1851.

Hab. Madagascar.

9. CHEIROGALEUS, Geoff.

Myspithacus, Fr. Cuv. 1833.

Myoxicebus et *Cebugale*, Lesson, 1840.

Cheirogaleus, Wagner, 1840.

Head very short, muzzle tapering. Ears small, hidden, bald on the edge. Cutting teeth $\frac{2-2}{6}$, the middle larger, in an arched series on side of intermaxillaries; the first false grinder in the upper jaw large, conical, erect, like a small canine, and in the lower jaw also rather large. Hind legs rather elongate, more equal than in the true Lemurs. The hind feet are short and broad, about two-thirds of the length of the shank.

M. Isidore Geoffroy, in his account of the genus *Hapalemur*, states that in *Cheirogaleus* "the cutting teeth are in straight cross lines, and the ears are membranaceous." If this is correct, the species here described are not *Cheirogalei*.

1. CHEIROGALEUS MILII, Geoff. 1828.

Maki nain, F. Cuv. Mamm. 1821.

"Grey-brown; palpebræ, sides of mouth, and whiskers black; throat, chest, and belly white; ears moderate, scarcely exerted, edge smooth, crest hairy; head globose; muzzle broad, depressed."

Hab. Madagascar.

2. CHEIROGALEUS TYPICUS, A. Smith, S. African Journal, ii.; Gray, Cat. Mam. B. M. 17. B.M.

Reddish brown; cheeks, throat, and beneath white; orbits blackish; tail cylindrical; fur on outside of ears blackish.

Hab. Madagascar.

Length of foot 2"; length of head about 2", and width about $1\frac{1}{2}$ ", as well as it can be measured on a stuffed specimen.

3. CHEIROGALEUS SMITHII, Gray, Ann. & Mag. N. H. 1842;
Cat. Mam. B. M. 16. B.M.

Microcebus pusillus, Waterhouse, Cat. Mus. Z. S. ed. 2. p. 12. no. 89.

Le Rat de Madagascar, Buffon, Supp. iii. t. 20.

Pale bay; chin and beneath pale yellow; outside of ears pale brown; orbits blackish; streak on nose and between the orbits white; the hairs are slate-colour at the base.

Hab. Madagascar.

Length of hind foot 1" 2'''.

This specimen is about one-fourth the size of the *C. typicus*. It may be the young of it; but the teeth, so far as one can see in a stuffed specimen, appear to be perfect.

Le Rat de Madagascar (Buffon, Supp. iii. t. 20) well represents this animal; but it has been considered as the type of the genus *Microcebus*, which is described as having a long slender hind foot.

We have a specimen in spirits, from the Zoological Society, that was named *Microcebus pusillus* by Mr. Waterhouse in the second edition of the Catalogue of the Museum of that Society, which agrees with this animal in almost all particulars; but the ears appear larger and bald, and the fur of the under part of the body whiter—perhaps both particulars arising from its having been preserved in spirits. The length of the feet and the teeth agree; but the feet, and especially the hands, are white and hairy, while in the dry specimen they are brown and nearly without hair.

It is sad to observe the persistence with which an error may be endowed. Vigers and Horsfield, in the 'Zoological Journal' in 1828, described an American Douroucouli as a Lemur, under the name of *Cheirogaleus commersonii*, believing that it came from Madagascar. This error was soon corrected; but Lesson retains it among the Lemuridæ, and re-named it *Glicebus rufus*; Schinz, in his 'Systematic Catalogue,' published in 1844, still retains it, and calls it *Scartes rufus* (vol. i. p. 102); and Giebel, 'Die Säugethiere,' published in 1859, p. 1018, still regards it as a *Cheirogaleus*.

10. LEPILEMUR? I. Geoff. 1851.

Microcebus, Waterhouse & Peters.

Cutting teeth $\frac{2-2}{6}$, the two front upper longer. Ears elongate, membranaceous, prominent. Foot broad, shorter than the shank. Tail cylindrical, covered with close-set short hair.

* *Back uniform.*

1. LEPILEMUR MURINUS.

B.M.

Lemur murinus, Miller, Cym. Phys. 25. t. 13.

Microcebus murinus, Waterh. Cat. Mus. Zool. Soc. 12. no. 90 (♂).

Galago minor, Gray, Ann. and Mag. N. H. 1842.

? *Little Macaco*, Penn. Quad.

Back pale reddish grey; underpart of the fur deep black; broad

streak up the nose between the orbits, the cheeks, and the underside whitish; front of the orbits on the sides of the nose brown; tail rather browner, slender, rather longer than the head and body; ears rather large, rounded at the end, pale, covered with short scattered hairs on the outside.

Hab. Madagascar; from Zoological Society.

Miller's figures very well represent this animal, but the tail is more bushy and browner than our specimens; the feet are of the proper size and form. The skull of the adult male has a rather longer nose than those of the typical *Galago*; and the orbits are very large, but scarcely so large as some of the species of that genus. It is 1" 2½" long, and 9½ lines broad. The two front upper cutting teeth are large and bifid, the inner ones small and cylindrical. The upper canines are erect; the lower ones are decumbent. The first and second upper false grinders are slightly conical and compressed.



Lepilemur murinus.

2. LEPILEMUR MYOXINUS.

Microcebus myoxinus, Peters, Mossamb. Säugeth. i. 14, t. 4.

Hind feet short, two-thirds of tibia.

Hab. Eastern Madagascar.

The figure of Dr. Peters agrees pretty well with our specimen of *L. murinus*; but the whole colour of the fur is rather darker, and the ears are larger. The figure of the skull also agrees well with that of *L. murinus*. This is not a *Microcebus* as now restricted; the feet are too short and broad for that genus.

Skull, length 1" 4" (according to the figure), breadth 10½" .

It is very like my *Cheirogaleus smithii*, but the ears are too large. The ears are very apt to be unnaturally stretched in the stuffing, or the converse and allowed to shrink in the drying.

3. LEPILEMUR MUSTELINUS, I. Geoff. Cat. Mamm.; Archives du Mus. t. .

Rufous; throat white; forehead and cheeks grey; lower part of body yellowish; the tail, hands, and lower part of the legs yellowish grey; outer side of the last third of the tail brown; tail two-thirds the length of the body; ears large, rounded, membranaceous, dark.

Length of head and body 14", of tail 10" .

Hab. Madagascar, 1842.

The description of this animal agrees in most particulars with *Lepilemur*, but it is said to have no upper cutting teeth. May not this be a peculiarity of the single specimen on which the species is founded?

** *Back with a black streak, forked on the occiput.*

4. LEPILEMUR FURCIFER.

Lemur furcifer, Blainv. Osteogr. 1839.

Cheirogaleus furcifer, I. Geoff.

Cheirogale, Chenu, Encycl. Quadrum. p. 269, f. 218?

"Grey; back with a streak, forked on the occiput and extended to the eyes; end of the tail black."

Hab. Madagascar.

Dr. Dahlbom observes that this species would be a *Lepilemur* if it was without upper cutting teeth; but as our *Lepilemures* have these teeth, I think it had better be placed in this genus.

11. CALLOTUS.

The ears very long, membranaceous, the hinder edge contractile, so as to fold up the conch like the long-eared Bats. Teeth —? canines strong. Feet broad, short, only two-thirds the length of the shank. The toes broad, with distinct roundish disks. The thumb very broad. The eyes very large; the iris very contractile, leaving a very small, erect, oval or lanceolate pupil. Tail very long, with spreading hairs, tapering at the end.

CALLOTUS MONTEIRI.

Galago monteiri, Bartlett, MS.

Uniform pale grey; side of the nose rather dark; hair of the body soft, dark slate-colour, with long, white, rather crisp tips.

Hab. Western Africa: Angola.

This genus chiefly differs from *Galago* in the shortness, breadth, and strength of the hind feet. The animal is only known from a specimen living in the possession of Mr. Monteiro, who has had it for more than a year. It is of the size of a small Common Cat; larger than *Otogale crassicaudata*.

††† *Feet elongate, slender, nearly as long as the shank or shin; tarsal bone longer than the metatarsal.*

12. GALAGO.

Cheirosciurus, Cuv. & Geoff. 1795.

Galago et Galagoides, A. Smith.

Scartes, Swainson.

Ears large, pellucid, membranaceous, hinder edge contractile. Cutting teeth $\frac{2-2}{6}$; the upper equal, slender; the lower shelving upwards. The upper canines erect; the lower ones decumbent, shelving forwards and upwards. The first false grinder short, broad, three-lobed, like the others, and not prominent and erect like the canines.

- * *Tail thick, with spreading hairs; fingers and toes very slender, elongate; the upper cutting teeth placed in an arched line, one before the other.*

1. GALAGO ALLENII.

B.M.

Galago allenii, Waterhouse, P. Z. S. 1837, p. 87.

Fur dark, blackish brown; forehead, rump, and base of tail grey; arms and legs reddish-washed; nose-streak and underside of body whitish; tail black; toes and fingers very slender, free; ears moderate.

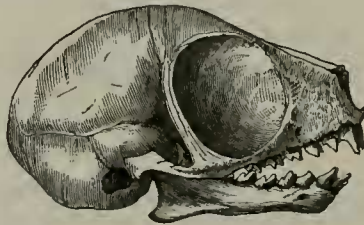
Length of hind foot 2" 10^{'''}. Skull (imperfect), length about 2" 2^{'''}, breadth 1" 5^{'''}.

Var. *gabonensis*. Skull small, 2" 0^{'''}, width 1" 4½^{'''}.

Hab. West Africa: Gaboon; Fernando Po.

There is a considerable difference in the two skulls of this species which we have, though the skins resemble each other very closely, so much so that it would not be easy to distinguish them as varieties. The one from Fernando Po is larger, and the upper cutting teeth form an arched series, and the grinders are very large and broad. The one from the Gaboon is rather smaller in size, the upper cutting teeth are in nearly the same straight transverse line, and the grinders are scarcely three-fourths of the general width of those of the other skull. Both skulls seem to have their perfect and permanent teeth. Probably this may arise from the sex of the specimen; but the sexes are not marked, and there is no external character to distinguish them. In a third and younger specimen the upper cutting teeth are subequal, and placed one before the other; so that this seems to be the normal position of the teeth.

- ** *Tail clavate, hair of lower part adpressed, of end spreading; the fingers and toes broader, shorter; upper cutting teeth very slender, in a straight cross line.*



Galago maholi.

2. GALAGO MAHOLI.

Galago maholi, A. Smith, Illust. S. African Z. t.

Otolienus galago, Wagner, Säugeth. Suppl. i. 292?

G. senegalensis, var., I. Geoff. Cat. p. 81.

?*Lemur* —, Brown, Illust. Zool. t. 44, 1776.

Scartes —, Swainson, Class. Mamm. 352, 1838.

Brownish grey; nose-streak, face, throat, and beneath whitish;

ears large; tail elongate, rather longer than head and body, subclavate, rather browner than the back.

Length of hind foot 2" 5".

Var. smaller; orbits darker.

Length of hind foot 2" 3". Skull, length 1" 6", breadth 1" 0".

Hab. South Africa.

Brown's figure seems to represent this species; but the hind foot is too short—having about the same proportion, compared with the shank-bone as *Lepilemur*; therefore I have only referred it to this species with doubt.

The fine male specimen which served as the type of Sir Andrew Smith's figure has the orbits of the same colour as the rest of the face; in two other rather smaller specimens in the Museum the orbits are darker, in one nearly black.

There are two skulls of this species in the Museum Collection, both from South Africa. They vary very slightly in the size of the teeth, especially in the breadth or squareness of the grinders. The upper cutting teeth are cylindrical, elongate, of the same size, and placed in a nearly straight cross line; the first upper false grinder is broad and lobed, like the second one.

3. GALAGO SENEGALENSIS, Geoff. 1796; I. Geoff. Cat. 81. B.M.

Galago geoffroyii, Fischer.

Galago acaciarum, Lesson.

Lemur galago, Schreb. Säugeth. t. 38 B.

Ears oblong, rounded at the end; fur grey; nose-streak, chin, and beneath white; tail and feet blackish brown; tail rather longer than the body and head; orbits blackish.

Length of hind foot 2" 3", of head 1" 7".

Hab. West Africa: Senegal; Gambia.



Galago sennariensis.

4. GALAGO SENNARIENSIS.

Galago (senegalensis) sennariensis, Kotschy, MS. B.M.

Bluish grey; face and feet blacker; orbits black; throat and under part of body and inside of limbs white; tail very long, one-half longer than the body and head, blackish; ears very large, rounded; fingers and toes slender.

Length of hind foot 2". Skull, length 1" 6" (about the back being imperfect), width 1" 2½".

Hab. "Sennaar, on the Nile."

The upper front cutting teeth are very slender, longer and more produced, the upper grinders are broader and squarer, and the hinder one is more triangular than in *G. maholi*.

There are three specimens of this species in the Museum, unfortunately not in a good condition; but they all decidedly differ from *G. maholi*, especially in the length of the toes, and in the fingers and toes being more slender. These three species are very similar, and I think they may easily be distinguished by the length and colour of the tail. *G. maholi* and *G. senegalensis* have the tail only rather longer (not more than one-fifth) than the body and head. In *G. maholi* the tail is rather dark, but grey; in *G. senegalensis* it is much darker, being blackish brown. In *G. senariensis* the tail is much longer than the body and head, and black. There seems also to be some difference, although difficult to describe, in the proportion of the ears and the head.

The following species have not come under my observation:—

1. *Galago conspicillatus*, I. Geoff. Cat. p. 81.

Ears acute, triangular, acute at the tip; fur above black-brown, beneath grey; tail elongate.

Hab. Port Natal; South Africa.

2. *Otolicnus peli*, Temm. Esquiss. Zool. 42.

3. *Galago senegalensis*, Rüppell, Abyss. Wirbelth.

4. *Otolicnus senegalensis*, Peters, Mossamb. ii. t. 4. f. 11–13.

Hab. Mozambique.

5. *Otolicnus teng*, Sundevall, Königl. Petersb. Akad. 1842, p. 201.

*** Tail slender, cylindrical; ears smaller.

Hemigalago, Dahlbom, 1857.

“A new genus, intermediate between *Galago* and *Microcebus*, I. Geoff.”



Galago demidoffi.

5. GALAGO DEMIDOFFII, Fischer, Mém. S. N. Mosc. (1806). B.M.

Hemigalago demidoffi, Dahlbom, Stud. p. 230, t. 10.

Galago senegalensis, L. Fraser.

Galago murinus, Murray, Edinb. Phil. Journ. n. s., x. t. 11.

Brown; side of face dark; nose-streak white, narrow; chin, throat,

and below reddish grey; tail one-half longer than the body and head, darker at the hinder half.

Skull, length 1" 5"', width 10½"'. Length of hind foot 1" 8"'. .

Hab. West Africa: Gaboon.

There are several specimens of this animal in the Museum Collection. The skin of the adult measures about 5 inches long, from the tip of the nose to the base of the tail; the tail is 7½ inches long; the hind foot and shin are about 1 inch 8 lines long. There are some smaller specimens in spirits, which appear to be younger, which have the hind foot only 1 inch and from 4 to 6 lines long.

I am induced to suppose that Mr. Murray's *Galago murinus* from Old Calabar is the young of this species, as the hind foot is figured about 1½ inch long.

The skull without a lower jaw, which in the Museum Catalogue of Bones is put under *Microcebus myoxinus* (p. 33), evidently belongs to this species.

**** *Tail cylindrical, elongate; ears small, partly hidden.*

Microcebus, Geoff. 1828.

Myscebus, Lesson, 1840.

Myocebus, Schinz, 1844.

6. GALAGO MADAGASCARIENSIS, Geoff. Tab. d. Quadr. 1812.

Microcebus rufus, Geoff. Cours Mam. 1825; I. Geoff. Cat. 80.

Lemur pusillus, Geoff. Bull. Phil. i. p. 89, 1795.

Microcebus rufus, Schinz, p. 107, 1841.

Petit mongous, Buffon, xiii. 177?

Rat de Madagascar, Buffon, Suppl. iii. p. 147, t. 20?

Hab. Madagascar.

Buffon's figure of *Le Rat de Madagascar*, which is the type of *Lemur pusillus*, represents the animal as having a short hind foot, and in that particular better represents my *Cheirogaleus minor* than any animal that M. I. Geoffroy would place with the *Galagina*, or M. Dahlbom with the *Macrotarsæ*. I have never seen a *Lemur* with small ears and a long foot; so that I suppose a true *Microcebus* has not occurred to me; and I doubt much if Buffon's figure represents the genus.

** *The fore and hind feet nearly equal in length; feet short, broad.*

† *Great toe very broad; tail none; index finger short.* Lorisina.

13. NYCTICEBUS, Cuvier, 1795.

Brudicebus, Geoff.

Bradlycebus, Blainv.; Lesson.

Head subglobose. Body and limbs stout and strong.

NYCTICEBUS TARDIGRADUS.

B.M.

Stenops tardigradus, Van der Hoeven.

Hab. Borneo and Sumatra.

2. *NYCTICEBUS JAVANICUS*, Geoff. 1812; V. d. Hoeven, Nat. Tijdschr. viii. p. 345, t. 6. f. 1, 2, 3, t. 7. f. 5-7. B.M.

Hab. Java.

14. LORIS.

Prosimia, Cuv. & Geoff. 1798.

Stenops (part), Illiger.

Arachnocebus, Lesson, 1840.

Head small; nose conical; ears thin, produced. Body and limbs elongate, slender.

LORIS GRACILIS, Linn.

B.M.

Loris, Buffon, xiii. t. 30.

Loris ceylonicus, G. Fischer.

Hab. Ceylon. India: Pondicherry.

Skull and skeleton in British Museum.

†† *The hand broad; the index finger abortive, clawless; eyes moderate.* Perodicticina.

15. PERODICTICUS, Bennett.

Tail shorter than the body. The hands and feet large. Fingers and toes free at the ends; the index finger rudimentary, but distinct. Lower cutting teeth large and prominent, and projecting. The apices of the vertebræ of the back, neck, and withers projecting beyond the skin, like prickles.

PERODICTICUS POTTO.

B.M.

Perodicticus geoffroyi, Bennett, P. Z. S. 1830, p. 109; Murray, Proc. Roy. Phys. Soc. Edinb. 1860, p. 191. fig. of hand and feet.

Potto bosmani, Lesson.

Hab. Sierra Leone; West Africa.

Skull and skeleton in British Museum.

16. ARCTOCEBUS.

Tail very short. Hands and feet small, with the lower phalanges (not including the thumb) united in the skin, the two upper joints free; the index finger abortive, reduced to a tubercle. Lower cutting teeth small, hyaline, hidden by the lips.

ARCTOCEBUS CALABARENSIS.

Perodicticus calabarensis, Smith, Proc. Roy. Phys. Soc. Edinb. 1860, p. 172. f. 1, 2 (hands), f. 3, 4 (head).

Hab. West Africa; Old Calabar.

Fam. II. TARSIDÆ.

Cutting teeth $\frac{4}{2}$, erect, cylindrical, conical; the two upper front elongate, acute; the lower ascending obliquely, crowded between the canines; grinders $\frac{6-6}{6-6}$. The fingers and toes free, well developed;

the first and second hind toes shorter, each with an elongate curved claw. Head short. Eyes and orbits very large. Limbs free, elongate. Foot very long, as long as the shin. Tail elongate, hairy.

TARSIUS, Storr, 1780; Daub. 1792.

Macrotarsus, Cuv. & Geoff.

Tarsier, Lacép.

Cephalopacus, Swainson, 1835.

Hypsicebus, Lesson, 1840.

TARSIUS SPECTRUM, Geoff.; Dahlbom, Studia, t. 11 (skeleton).

B.M.

Tarsius pallasii, Geoff.

Tarsius daubentonii, Audeb.

Tarsius bancanus, Horsf. Java, t.

Lemur tarsius, Erxl.

Lemur spectrum, Pallas.

Didelphis macrotarsus, Gmelin.

Hab. Borneo; Celebes.

Fam. III. DAUBENTONIADÆ.

Cheiromyidæ, Bonap.

Glirisimixæ, Dahlbom.

Cutting teeth $\frac{2}{2}$, compressed, large; canines none; grinders $\frac{4-1}{3-3}$.

Limbs free. The fingers and toes well developed. The fingers very long and slender. The great toe broad. The index finger with a sharp curved claw. Face short. Tail elongate, hairy.

DAUBENTONIA, Geoff. Decad. Philos. iv. p. 193, 1795; Dahlbom, 1851.

Aye-Aye, Lacép. 1799.

Cheiromys, Cuvier, 1800.

Chironmys, Illig. Prod. 1811.

Cuvier refused to use the name proposed by Geoffroy, because it was given in honour of a person; but as this rule has not been generally observed, the objection ceases to be operative.

DAUBENTONIA MADAGASCARIENSIS, Geoff.; Dahlbom, Studia, p. 236, t. 12. B.M.

Aye-Aye, Sonnerat, Voy. Ind. ii. p. 138, t. 76. 1782.

Sciurus madagascariensis, Gmelin.

Cheiromys madagascariensis, Geoff. 1803; Owen, Trans. Zool. Soc. 1863.

Hab. Madagascar.

Fam. IV. GALEOPITHECIDÆ.

Cutting teeth $\frac{4}{3}$, the upper middle small, side one compressed, lower shelving, pectinate; canines $\frac{1-1}{1-1}$, like the molars; grinders $\frac{5-5}{5-5}$. Limbs and tail united by a membrane covered with fur. Limbs

short, subequal. Fingers and toes short, subequal, compressed, united by a membrane.

GALEOPITHECUS.

1. GALEOPITHECUS VOLANS.

B.M.

Lemur volans, Linn.

Galeopithecus variegatus, Geoff.

Galeopithecus rufus, Geoff.

?*Galeopithecus ternatensis*, Geoff.

G. temminckii, Waterh.

Galeopithecus undatus, A. Wagner; Schreb. Säugeth. i. p. 326, t. 307 b.

Hab. Java; Sumatra; Borneo; Siam.

2. GALEOPITHECUS PHILIPPINENSIS, Waterhouse, P. Z. S. 1838, p. 119.

B.M.

Hab. Philippines.

23. GALEOPITHECUS MACROURUS, Temm.

7. DESCRIPTIONS OF TWO NEW GENERA OF LIZARDS (HOLASPIS AND PORIDOGASTER, A. SMITH, MS.). BY DR. J. E. GRAY, F.R.S., ETC.

(Plates XX., XXI.)

Sir Andrew Smith, M.D., having most kindly sent to the collection of the British Museum two most interesting Lizards, which he has very properly named as the types of two new genera, I hasten to send to the Society a short description of each of them under the MS. names which Sir Andrew Smith has attached to them in his museum.

The first genus is allied to the family *Lacertinidæ*, and is at once known from all the genera of that group by the peculiarity of having two series of broad band-like scales down the vertebral line of the back, which are continued on the upper surface of the base (and probably of the whole length) of the tail; but the single specimen which I have seen has evidently had the end of the tail reproduced and covered with abnormal scales. The tail is depressed, and has a series of prominent keeled scales, forming a dentated keel on each side.

This genus I consider forms a distinct family, which may be called *HOLASPIDÆ*, distinguished from *Lacertinidæ* by the form of the tail and the peculiarities of the scales.

1. HOLASPIS, A. Smith, MS.

Head pyramidal, depressed; crown covered with regular, many-sided shields; side of face shielded; nostrils nearly on the ridges near the front of a single scale with a shield in front of it; labial